

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, FLAT CABLE, NONENVIRONMENTAL  
SOCKET INSULATION DISPLACEMENT

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and the issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation: MIL-DTL-83503.

THESE CONNECTORS ARE NOT INTENDED FOR AIRBORN APPLICATIONS

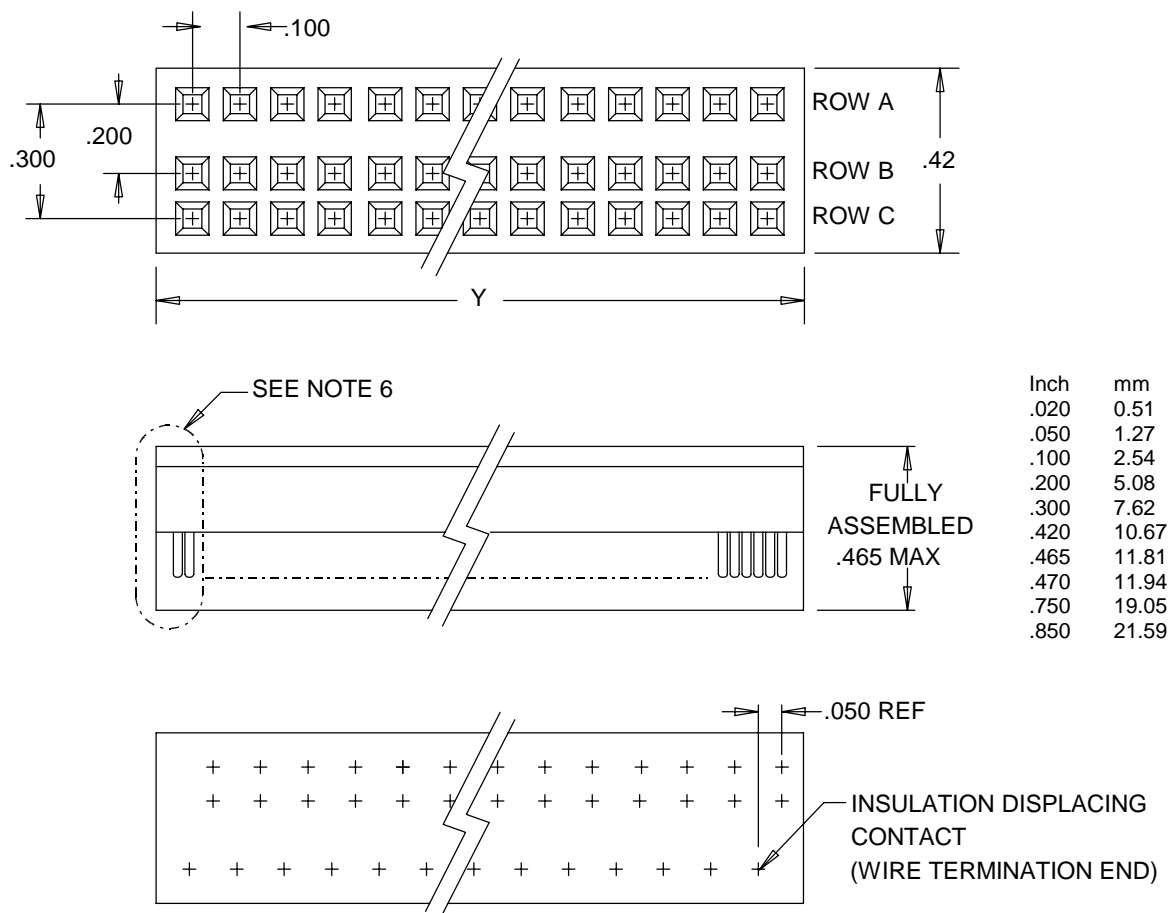
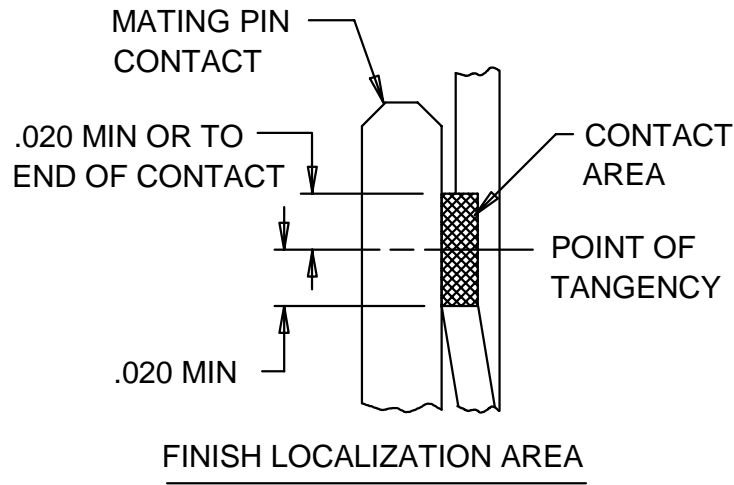


FIGURE 1 Dimensions and configuration.

MIL-DTL-83503/22C



Part No.	'Y'	Size	Loaded rows	No. Contacts
M83503/22-01	.750 (19.05)	2 X 7	A and C	14
M83503/22-02	.750 (19.05)	2 X 7	A and B	14
M83503/22-03	.850 (21.59)	2 X 8	A and C	16
M83503/22-04	.850 (21.59)	2 X 8	A and B	16
M83503/22-05	.750 (19.05)	3 X 7	A, B, and C	21
M83503/22-06	.850 (21.59)	3 X 8	A, B, and C	24

**NOTES:**

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are  $\pm 0.005$  (0.13 mm) for three place decimals and  $\pm 0.01$  (0.3 mm) for two place decimals.
4. Rows B and C have a common conductor.
5. Interface minimum post .21 inch (5.3 mm) engagement length, interface: Round conductor flat cable to .100 inch x .100 inch (2.54 x 2.54 mm) spaced; .025 inch (0.64 mm) square post, .240 inch (6.10 mm) minimum.
6. Method of connection of cover to body optional but shall meet the requirements of MIL-DTL-83503 and this specification sheet.
7. Unused (unloaded) holes optional.

FIGURE 1 Dimensions and configuration - Continued.

MIL-DTL-83503/22C

REQUIREMENTS:

Design and construction:

Dimensions and configuration: See figure 1.

Temperature range: -55°C to +120°C.

Current rating: 1 ampere.

Materials:

Contacts: Beryllium copper ASTM B196 or ASTM B196, phosphor bronze in accordance with ASTM B139 with gold plating in contact area.

Housing: Glass filled nylon in accordance with ASTM D4066; diallylphthalate, type SDG-F; or glass filled polyester in accordance with ASTM D5948.

Wire accommodation: 28 AWG stranded, .050 inch (1.27 mm) spacing between conductor centers. Voltage rating: 300 V rms.

Dielectric withstanding voltage (at sea level): 500 V rms, minimum.

Test wire size: 28 AWG stranded.

Contact retention: Not applicable.

Contact resistance: Initial 50 milliohms; after testing 50 milliohms in accordance with MIL-STD-1344, method 3004.

Part number: M83503/22-(dash number from figure 1).

Interface: Round conductor flat cable, .050 inch (1.27 mm) centers, to .025 inch (0.64 mm) round or square posts.

Assembly tool : M22520/32.

Polarization: Not required.

Marking: Part number shall be marked on connector with an ink stamp or molded raised letters (see figure 1).

Accessories: 301 stainless steel or other materials per MIL-DTL-83503.

CONCLUDING MATERIAL

Custodian:  
Air Force - 85

Preparing activity:  
DLA-CC

Review activities:  
Air Force - 11, 17, 99

(Project 5935-4110-05)